IN THE CLAIMS:

Prior to examination on the merits, please amend the claims of the international application as follows.

1. (Original) A gas sensor comprising a chamber arranged to admit gas, one or more radiation sources, a plurality of detectors sensitive to radiation from the one or more sources, and a plurality of respective reflective curved surfaces, the detectors each being arranged to receive radiation from the one or more sources reflected by the respective curved surfaces of curvature such that light from the one or more sources is focussed onto each detector.

2. (Original) A gas sensor as claimed in claim 1, wherein one source is located substantially at a first focus of each respective reflective curved surface.

3. (Original) A gas sensor as claimed in claim 1, wherein each detector is located substantially at a second focus of each respective reflective curved surface.

4. (Currently Amended) A gas sensor as claimed in ~~any one of claims 1 to 3~~ claim 1, reflective curved surfaces are part ellipsoidal surfaces.

5. (Currently Amended) A gas sensor as claimed in ~~any preceding~~ claim 1, further comprising a central region between the detectors, there being one source being located in the central region.

6. (Currently Amended) A gas sensor as claimed in claim 4 ~~or 5~~, wherein one of the detectors is at a focus of a first part ellipsoidal surface, a second detector is at a focus of a second part ellipsoidal surface and the first and second ellipsoids share a common virtual focus.

7. (Original) A gas sensor as claimed in claim 6, wherein the first sensor is arranged to detect a first predetermined gas and the second sensor is arranged to detect a second predetermined gas.

8. (Currently Amended) A gas sensor as claimed in ~~any preceding~~ claim 1, further comprising a reference detector.

9. (Currently Amended) A gas sensor as claimed in ~~any preceding~~ claim 1 wherein one of the one or more radiation sources is an infrared source.

10. (Currently Amended) A gas sensor as claimed in ~~any preceding~~ claim 1 wherein the source is arranged to heat substantially all the surfaces from which light is reflected to a temperature above ambient temperature.

11. (Original) A gas sensor as claimed in claim 5, wherein the one radiation source is arranged with the plurality of detectors around the one source, each respective reflective surface being arranged to reflect light from the one source to the respective detector.

12. (Original) A gas sensor as claimed in claim 11, further comprising a further reflective surface so arranged that light from the one radiation source is reflected by the further reflective surface onto each respective reflective curved surface and then to each respective detector.

13. (Original) A gas sensor as claimed in claim 12, wherein the further reflective surface comprises an annular reflective surface.

14. (Currently Amended) A gas sensor as claimed in ~~any preceding~~ claim 1, wherein each detector is arranged to receive radiation from a narrow solid angle.

15. (Original) A gas sensor as claimed in claim 1, wherein the one or more radiation sources comprising a plurality of radiation sources, the detectors each being arranged to receive radiation from a respective one of the plurality of radiation sources reflected by a respective one of the curved surfaces.

16. (Original) A gas sensor as claimed in claim 5, wherein the one source is generally omnidirectional.